REMARKS

The Office Action mailed May 18, 2005, has been reviewed and carefully considered. Claims 1, 10, 14, 23 and 24 have been amended. Claims 1-24 are pending in the application.

In paragraph 2 on page 2 of the Office Action, claims 1, 2, 4-7, 10-15, 17-20 and 23-24 were rejected under 35 U.S.C. § 102(b) as being anticipated by Ziperovich.

Claims 3, 8-9, 16 and 21-22 were objected to as being dependent upon a rejected base claim, but were indicated as being allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Applicant respectfully traverses the rejections, but in the interest of expediting prosecution has amended to the claims to more particularly distinguish the invention.

Ziperovich does not disclose determining a read head channel amplitude based upon generating at least two input signals of different amplitudes, obtaining a VGA gain code associated with the at least two input signals of different amplitudes and calculating an ADC code spread using code received from the ADC. Rather, Ziperovich merely discloses a self-test circuit for testing a PRML channel of a hard disk drive. According to Ziperovich, a sequence of known digital values from a source are injected into the input node. A sequence of pseudo samples is generated from the sequence of known digital values within the pseudo sample generator. A controlled amount of digital noise is generated within the digital noise generator, and the digital noise is added to the pseudo samples at the summing circuit to produce noisy pseudo samples. The noisy pseudo samples are passed through the digital memory path detector to produce a test value indicative of detected pseudo samples.

However, Ziperovich does not even suggest determining a read head channel amplitude based upon generating at least two input signals of different amplitudes, obtaining a VGA gain code associated with the at least two input signals of different amplitudes and calculating an

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ADC code spread using code received from the ADC. Rather, Ziperovich merely adds noise and bias to ideal digital pseudo samples locally generated within an on-chip test block for testing performance of digital signal and control elements of a synchronous sampling data detection channel.

Accordingly, Applicants respectfully submit that Ziperovich fails to teach, disclose or suggest the invention as recited in the claims.
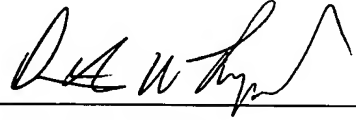
On the basis of the above amendments and remarks, it is respectfully submitted that the claims are in immediate condition for allowance. Accordingly, reconsideration of this application and its allowance are requested.

If a telephone conference would be helpful in resolving any issues concerning this communication, please contact Attorney for Applicant, David W. Lynch, at 423-757-0264.

Respectfully submitted,

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